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January 30, 2012



COLONEL
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SUPERINTENDENT

SPECIAL ORDER NO: 23-1203

TO: All Automotive Safety Enforcement Division Personnel and Authorized Inspection Station Personnel

SUBJECT: Approved Headlight Machines with Floor Slope Alignment Procedures

PURPOSE:

- A. To identify those headlight machines approved for use in the Maryland Vehicle Inspection Program.
- B. To establish procedures for determining floor slope alignment for use in the approved headlight machines.

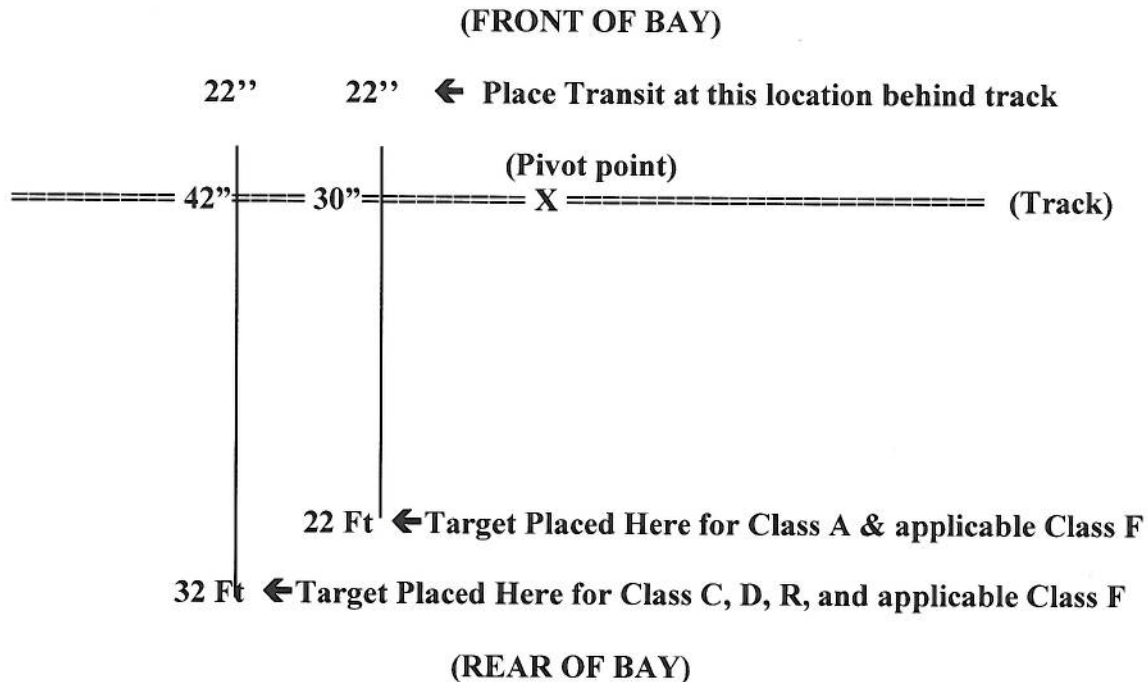
POLICY:

- A. The following headlight machines are approved for use in the Maryland Vehicle Inspection Program. No other machines are authorized for use in determining whether headlight alignment on a vehicle passes the minimum standards of a safety inspection.
 - 1) Hoppy Vision 1
 - 2) Hoppy Vision 100
 - 3) Symtech Corporation "HBA 5"
 - 4) American Aimers Vision II Pro
- B. Before authorized inspection stations are permitted to use any new headlamp machine in determining vehicle headlamp aim on vehicle inspections or Safety Equipment Repair Orders, all registered inspection mechanics at the authorized inspection station must successfully demonstrate their ability to use the headlight machine to Division personnel.
- C. Prior to utilizing an approved headlight machine during a vehicle safety inspection, the floor slope specification for the inspection area will be determined and programmed into the machine utilizing procedures established in this Order.

PROCEDURES:**A. Hoppy Vision 1 and 100 and American Aimers Vision II Pro**

To determine the floor slope specification required for programming of the Hoppy Vision 1, Hoppy Vision 100 and American Aimers Vision II Pro, the following procedures will be followed by authorized inspection station personnel for obtaining measurement reference points when using the Hoppy Split Image Transit.

1. For Class "A" and those Class "F" stations inspecting vehicles 10,000 pounds and under GVWR - Measure 30 inches from the center pivot point of the headlight track out towards the driver's side of the track and mark this point.
For Class C, D, R, and those F stations inspecting vehicles over 10,000 lbs. GVWR - Measure 42 inches from the center pivot point of the headlight track out towards the driver's side of the track and mark this point.
2. For All Class Stations - Measure 22 inches behind the headlight machine track, towards the front of the bay, at the above point marked in step 1, and place the transit at that location.
3. For Class "A" and those Class "F" stations inspecting vehicles 10,000 pounds and under GVWR - Measure 22 feet from the transit toward the rear of the bay and place the target.
For Class C, D, R, and those F stations inspecting vehicles over 10,000 lbs. GVWR - Measure 32 feet from the transit toward the rear of the bay and place the target.
4. Follow the Hoppy Split Image Transit instructions to obtain the floor slope degree reading from the transit using the above established reference point procedures, and program the Hoppy Vision 1, 100 and Vision II Pro per the headlight machine instruction manual for programming floor slope. (See diagram A)
5. When conducting a vehicle inspection utilizing these machines, the readings will be entered on the Motor Vehicle Inspection Report (Checklist) as a "P" for pass or an "F" for fail in the block for headlight readings.

Diagram (A)For use with: Hoppy Vision 1 and 100 and American Aimers Vision II Pro**B. Symtech Corporation "HBA 5"**

To determine the floor slope specification required for programming of the Symtech Corporation "HBA 5", the following procedures will be followed by authorized inspection station personnel for obtaining measurement reference points required for calculating the slope.

1. For Class "A" and those Class "F" stations inspecting vehicles 10,000 pounds and under GVWR - Measure 30 inches from the center pivot point of the headlight track out towards the driver's side of the track and mark this point.

For Class C, D, R, and those F stations inspecting vehicles over 10,000 lbs. GVWR - Measure 42 inches from the center pivot point of the headlight track out towards the driver's side of the track and mark this point.

2. For All Class Stations - Measure 22 inches in front of the headlight machine track, towards the rear of the bay, at the above point marked in Step 1, to obtain the **first** reference measurement point. Mark this point using tape or other method for identification.
3. For Class "A" and those Class "F" stations inspecting vehicles 10,000 pounds and under GVWR - Measure 20 feet in front of the headlight track, towards the rear of

the bay, to obtain **second** reference point. Mark this point using tape or other method of identification.

For Class C, D, R, and those F stations inspecting vehicles over 10,000 lbs. GVWR

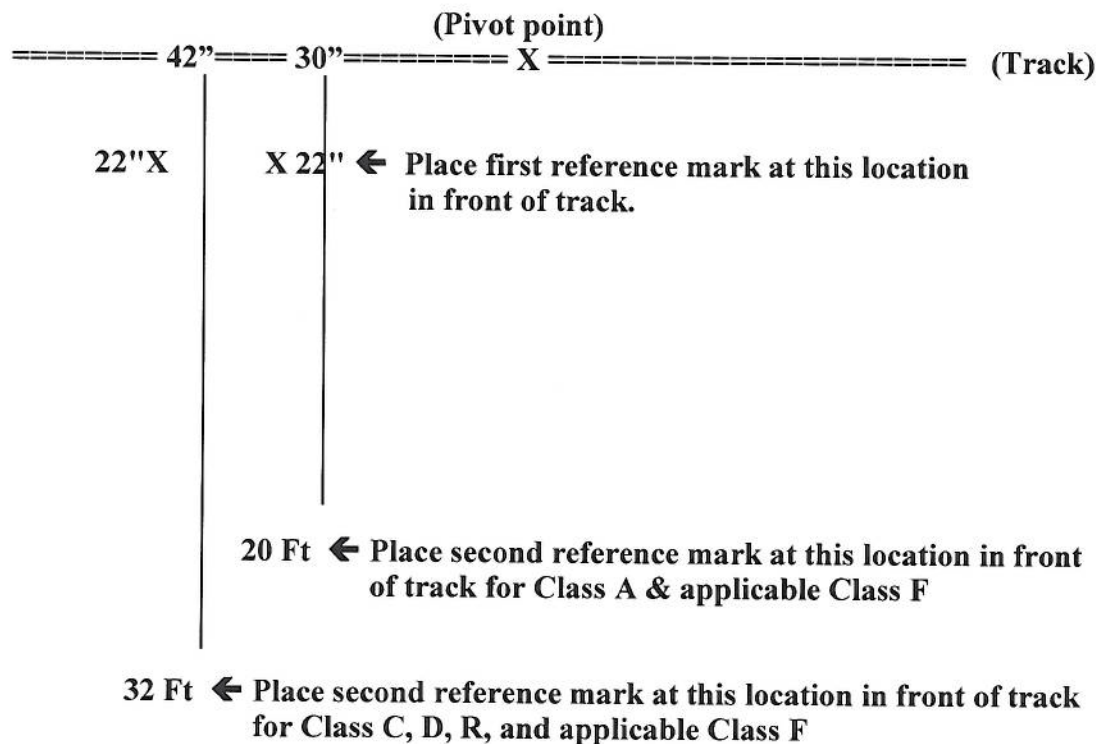
- Measure 32 feet in front of the headlight track, towards the rear of the bay, to obtain **second** reference point. Mark this point using tape or other method of identification.

4. Follow instructions in the Symtech Corporation "HBA 5" manual for Floor Slope Alignment procedures, using the reference point locations obtained in the above steps, to program the headlight machine floor slope (See diagram B).
5. When conducting a vehicle inspection utilizing this machine, the readings will be entered on the Motor Vehicle Inspection Report (Checklist) as a "P" for pass or an "F" for fail in the block for headlight readings.

Diagram (B)

For use with: Symtech Corporation "HBA 5"

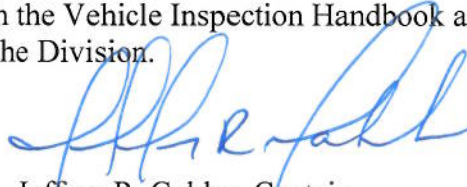
(FRONT OF BAY)



(REAR OF BAY)

This order supersedes all other orders or memorandums in conflict therewith; specifically cancelling Special Order 23-0303.

This special order is to be inserted in the Vehicle Inspection Handbook as directed in the Special Order Table of Contents issued by the Division.



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